04/09/2007

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re F	Patent Application of	) Group Art Unit: Unassigned			
Zhong	gxin Ge et al.	) Examiner: Unassigned			
Applic	eation No.: 10/594,432	Confirmation No.: Unassigned			
Filing	Date: September 26, 2006	,			
Title:	PEGYLATION AND HYDROXYLATION OF TRIMETALLIC NITRIDE ENDOHEDRAL METALLOFULLERENES	) ) ) )			
	SECON INFORMATION DISCLOS <u>TRANSMITTAL</u>	SURE STATEMENT			
P.O. E	nissioner for Patents Box 1450 ndria, VA 22313-1450	·			
Sir:					
form F	Enclosed is a SECOND Information Disclor PTO-1449 for the above-identified patent ap				
$\boxtimes$	No additional fee for submission of an IDS	is required.			
	The fee of 180 as set forth in 37 C.F.R. § 1.17(p) is also enclosed.				
	A statement under 37 C.F.R. § 1.97(e) is a	also enclosed.			
	A statement under 37 C.F.R. § 1.97(e), ar 37 C.F.R. § 1.17(p) are also enclosed.	nd the fee of 180 as set forth in			
	Charge to Deposit Acco	unt No. 02-4800 for the fee due.			
	A check in the amount of	is enclosed for the fee due.			
	Charge to credit card fo	r the fee due. Form PTO-2038 is attached			
	The Director is hereby authorized to charg 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may any overpayment, to Deposit Account No.	be required by this paper, and to credit			

Respectfully submitted,

By:

BUCHANAN INGERSOLL AND ROONEY PC

Date April 9, 2007

duplicate.

Christopher L. North Registration No. 50433

P.O. Box 1404 Alexandria, VA 22313-1404 1737 King Street, Suite 500 Alexandria, VA 22314-2727 703 836 6620

/Daniel Mccracken/

10594432 - GAU: 1793 Attorney's Docket No. 1034136-000035

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Ap	plication of	)	
Zhongxin Ge e	t al.	)	Group Art Unit: Unassigned
Application No.	: 10/594,432	)	Examiner: Unassigned
Filed: Septem	ber 26, 2006	)	Confirmation No.: Unassigned
OF TRI	ATION AND HYDROXYLATION METALLIC NITRIDE IEDRAL LOFULLERENES	)	

# SECOND INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed. However, copies of the listed U.S. patents and U.S. patent application publications are not enclosed since it is no longer required according to the July 11, 2003 waiver of the requirement for copies of cited U.S. patents and U.S. patent application publications in national patent applications filed after June 30, 2003 and international applications entering the national stage under 35 U.S.C. § 371 after June 30, 2003.

# **U.S. PATENT DOCUMENTS**

- KATORI et al., U.S. Patent Publication No. 2003/0031917 A1, published on February 13, 2003.
  - EKLUND, U.S. Patent No. 5,453,413, issued on September 26, 1995.
- KAJIURA et al., U.S. Patent Publication No. 2003/0015414 A1, published on January 23, 2003.
- 4. TAKIKAWA et al, U.S. Patent Publication No. 2002/0061638 A1, published on May 23, 2002.
- ANAZAWA et al., U.S. Patent Publication No. 2001/0050219 A1, published on December 13, 2001.
  - 6. ZETTL et al., U.S. Patent No. 6,063,243, issued on May 16, 2000. /Daniel Mccracken/

# Buchanan Ingersoll & Rooney PC

10594432 - GAU: 1793

SECOND Information Disclosure Statement Application No. <u>10/594,432</u> Attorney's Docket No. <u>1034136-000035</u>

7. CRESPI et al., U.S. Patent Publication No. 2005/0067349 A1, published on March 31, 2005.

#### NON-PATENT LITERATURE DOCUMENTS

- IEZZI, ERICK B. ET AL., "A Symmetric Derivative of the Trimetallic Nitride Endohedral Metallofullerene, Sc₃N@C<sub>80</sub>," J.AM.CHEM.SOC., 2002, pp. 524-525, Vol. 124, No. 4. American Chemical Society.
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- OLMSTEAD, MARILYN M. ET AL., "Isolation and Crystallographic Characterization of ErSc₂N@C₀: an Endohedral Fullerene Which Crystallizes with Remarkable Internal Order," J.SM.VHRM.SOC., 2000, pp. 12220-12226, Vol. 122, No. 49, American Chemical Society.
- STONE, A.J. ET AL., "Theoretical Studies of Icosahedral C<sub>60</sub> and Some Related Species," Chem. Physics Ltrs., 8/8/86, pp. 501-503, Vol. 128, No. 5,6, Elsevier Science Publishers B.V.
- TRULOVE, "Filled buckyballs diamonds from soot," article from website http://www.research.vt.edu/resmag/2002winter/buckyballs.html, 9 March 2002 (09.03.2002), available at www.archive.org. (entire document).
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- ZHANG et al., "The tribological behaviors of ordered system ultrathin films," Science, 2003, vol. 254, pp. 959-964, Elsevier Science, B.V., London, England.
- JOURNET et al., "Large-scale production of single-walled carbon nanotubes by the electric-arc technique," Nature, 1997, vol. 388, pp. 756-758, American Association for the Advancement of Science, Washington, D.C.
- SAITO et al., "Single-Layered Carbon Nanotubes Synthesized by Catalytic Assistance of Rare-Earths in a Carbon Arc," J. Phys. Chem., 1995, vol. 99, pp. 16076-16079, American Chemical Society, Washington, D.C.
- WILSON et al., "Advanced materials: fluorous fullerenes and nanotubes," Tetrahedron, 2002, vol. 58, pp. 4041-4047, Elsevier Science Ltd.

The documents are being submitted within three (3) months of the filling or entry of the national stage of this application or before the first Office Action on the merits, whichever

//Daniel Mccracken/

Receipt date: 04/09/2007 10594432 - GAU: 1793
SECOND Information Disclosure Statement

ECOND Information Disclosure Statement
Application No. 10/594,432
Attorney's Docket No. 1034136-000035

is later. Since these documents are being filed within the time period set forth in 37 C.F.R. § 1.97(b), no fee or statement is required.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: April 9, 2007

By:

Christopher L. North Registration No. 50433

P.O. Box 1404 Alexandria, VA 22313-1404 703 836 6620

/Daniel Mccracken/

# Receipt date: 04/09/2007 Substitute for form 1449/PTO & 1449B/PTO

Sheet 1 of 1

# SECOND INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

		10094432 - SAU: 1
	Complete if Known	188
Application Number	10/594,432	APR 0 9 2007
Filing Date	September 26, 2006	3
First Named Inventor	Zhongxin Ge et al.	(A)
Examiner Name	Unassigned	RADEMART
Attorney Docket No.	1034136-000035	

IIS	PATENT	DOCUMENTS

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Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)		
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	5,453,413	Α	Eklund	09-26-1995		
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	2002/0061638	A1	Takikawa et al.	05-23-2002		
	2001/0050219	A1	Anazawa et al.	12-13-2001		
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FOREIGN PATENT DOCUMENTS											
								TATUS	-		
Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec

	NON-PATENT LITERATURE DOCUMENTS				
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
	IEZZI, ERICK B. ET AL., "A Symmetric Derivative of the Trimetallic Nitride Endohedral Metallofullerene, Sc <sub>3</sub> N@C <sub>80</sub> ," J.AM.CHEM.SOC., 2002, pp. 524-525, Vol. 124, No. 4, American Chemical Society				
	KRATSCHMER, W. ET AL., "Solid C <sub>60</sub> : a new form of carbon," NATURE, 9/27/90, pp. 354-358, Vol. 347, Nature Publishing Group				
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	ZHANG et al., "The tribological behaviors of ordered system ultrathin films," Science, 2003, vol. 254, pp. 959-964, Elsevier Science, B.V., London, England.				
	JOURNET et al., "Large-scale production of single-walled carbon nanotubes by the electric-arc technique," Nature, 1997, vol. 388, pp. 756-758, American Association for the Advancement of Science, Washington, D.C.				
	SAITO et al., "Single-Layered Carbon Nanotubes Synthesized by Catalytic Assistance of Rare- Earths in a Carbon Arc," J. Phys. Chem., 1995, vol. 99, pp. 16076-16079, American Chemical Society, Washington, D.C.				
	WILSON et al., "Advanced materials: fluorous fullerenes and nanotubes," <i>Tetrahedron</i> , 2002, vol. 58, pp. 4041-4047. Flsevier, Science I td.				

Examiner Signature	/Daniel Mccracken/	Date Considered	06/15/2010	